

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Examiner's refusal to consider information previously submitted in an IDS is not understood because English language abstracts were attached (as the last page) of each of the two Japanese language documents being cited. Duplicate copies of both these references (again including the English language abstract) are attached together with a fresh Form PTO-1449 and the UK Patent Office Search Report citing these as being of "technological background an/or state of the art" interest.

Under the circumstances, it is not believed that any additional IDS fee should be charged. However, if such an IDS fee is deemed necessary, then it may be charged (under protest) to the undersigned's Account No. 14-1140. In any event, the record is clear that the applicant has timely provided to the USPTO a copy of all relevant information with respect to these references presently in the possession of the applicant. Consideration and official citation of this submitted information is respectfully requested.

In response to the Examiner's objection to the lack of a period at the end of claim 8, the above amendment has corrected this oversight.

The rejection of claims 1-8 under 35 U.S.C. §102 as allegedly anticipated by Nakamura et al. '031 is respectfully traversed.

The exemplary embodiment of this invention assigns, in a TCP flow, a different priority to TCP control packets than to TCP data packets. The reason for this is to expedite the flow of TCP control packets through a switch and onwards through the network. The particular mechanism is to determine whether any flag other than the PSH flag is set. The PSH flag is the

one that, if set, indicates a ‘data packet’ and causes the passing of the contents to the ‘application layer’. Control packets do not have the PSH flag set (but must have at least one of the other flags URG, ACK, RST, SYN or FIN set).

The Examiner, in Section 3 (page 3), makes the following clearly erroneous assertion regarding the Nakamura teaching:

“Herein, the assigned priority refers to the connection establishment flag (control packet), which is different from the priority of user data packets (assigning priority to control packet that is different to the priority of the data packets they control).”

Nakamura (at column 13, lines 27-40) refers only to the setting up or tearing down of a connection (lines 35-40). This is the significance of his reference to the SYS and FIN flags. Nakamura provides for an entry in a routing table one of two “priorities”, according as to whether the connection establishment flags have been received or not. There are two possible types of flow.

First, a Nakamura flow may be initiated with a packet indicating connection startup. As the first packet for that flow has a connection flag, then the entry which is put into the sub-routing table is given a “priority code 1” (column 15, lines 13-16). All subsequent packets for that flow will access this entry in the sub-routing table. When a control packet indicating disconnection of that flow is received, then the entry in the sub-routing table is removed (column 15, lines 21 and 34/35). There is not the slightest suggestion that data and control packets are given different priorities.

Second, a Nakamura flow may be initiated with a non-connection flag packet. The entry put into the sub-routing table is given “priority code 0” (column 15, lines 17-19). All subsequent

packets in that flow will access this entry in the sub-routing table. When a control packet indicating disconnection of that flow is received, then the entry in the sub-routing table is removed.

Further, and even more important, is the significance, and use, of the “priority” field. Nakamura uses the priority field, which is simply a single bit, and not a multiple bit field as is used for indicating transmission priority, to indicate not a priority given to packets but to indicate whether an entry in the sub-routing table can be overwritten with another entry, or not.

Entries with a priority value of 1 may not be overwritten. Entries with a priority value of 0 may be overwritten. This is to allow over-writing when the sub-routing table is full and a new entry is requesting download to it. This process is described by Nakamura at column 3, lines 41-46 and in column 9, lines 34-38.

The networking reason for having a “priority” code for the routing table entry is explained by Nakamura at column 9, lines 39-55. It is because entries with code “0” usually arise from single shot or sporadic packets, and an example is given in Nakamura at column 15, lines 50-67. The priority code mentioned in Nakamura simply provides a housekeeping mechanism for a local cache which should contain routing information only for the most common ‘genuine’ flows.

Nakamura’s allocation of “priority” is not to packets; it is to routing table entries to protect those entries against being over-written; Nakamura does not control, directly or indirectly, the allocation of priority to packets and Nakamura does not assign to control packets a priority different from that of the data packets that they control.

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Finally, the collection establishment flag merely indicates the type of packet; it does not indicate a priority for it.

Accordingly, this entire application is now believed to be in allowable condition and a formal Notice to that effect is respectfully solicited.

Respectfully submitted,

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